AUTHOR INDEX

Agarwal, M.K., P.A. Wani and P.D. Patel, Vapour growth and characterization of $Mo_{0.5}W_{0.5}Se_2$ single crystals 49 (1980) 693
Agrawal, V.K., see Sharma 49 (1980) 580
Ahdout, H., see Billia 49 (1980) 431
Ahn, K.-S., see Tiller 49 (1980) 483
Ali, S.Z., see Khan 49 (1980) 303
Antell, G.R., A method for the removal of free indium from the surface of InP grown by liquid phase epitaxy 49 (1980) 591
Arizumi, T., see Kobayashi 49 (1980) 419
Armington, A.F., J.A. Bruce, L.E. Halliburton and M. Markes, Defects induced by the seed orientation during quartz growth 49 (1980) 739
Assmus, W., see Takke 49 (1980) 97

Babai, F.H. and E.A.D. White, The growth of void-free crystal cored fibres of organic materials 49 (1980) 245
Bardsley, W., see Series 49 (1980) 363
Bardsley, W., D.T.J. Hurle, M. Hart and A.R. Lang, Structural and chemical inhomogeneities in germanium single crystals grown under conditions of constitutional supercooling 49 (1980) 612
Barraclough, K.G., see Series 49 (1980) 363
Barrière, A.S., see Gevers 49 (1980) 45
Bartlett, B.E., P. Capper, J.E. Harris and M.J.T. Quelch, Factors affecting the electrical characteristics of cadmium mercury telluride crystals 49 (1980) 600
Baudelet, B., see Hashimoto 49 (1980) 410
Bednarczyk, E., see Spirlet 49 (1980) 171
Begg, I.D., R.S. Narang, K.J. Roberts and J.N. Sherwood, X-ray topographic studies of the perfection of crystals of the organic metal: tetrathiofulvalene–tetracyanoquinodimethan (TTF–TCNQ) 49 (1980) 735
Bennema, P., see Hartman 49 (1980) 145
Bhalla, A.S., see Hayashi 49 (1980) 687
Bhatt, V.P. and S.B. Trivedi, Etching of Se–Te crystals 49 (1980) 743
Billia, B., H. Ahdout and L. Capella, Morphological stability of a planar interface during unidirectional growth of a dilute binary alloy 49 (1980) 431
Biloni, H., see Solari 49 (1980) 451
Bloem, J. and W.A.P. Claassen, Rate-determining reactions and surface species in CVD of silicon. I. The SiH_4–HCl–H_2 system 49 (1980) 435
Boettinger, W.J., see Coriell 49 (1980) 13
Boistelle, R., see Rinaudo 49 (1980) 569
Bonchev, D., O. Mekenyan and H. Fritsche, An approach to the topological modelling of crystal growth 49 (1980) 90
Bozhevol'nov, V.E., see Orlov 49 (1980) 109
Bruce, J.A., see Armington 49 (1980) 739

Camarillo, E., see Riveros 49 (1980) 85
Campbell, S.J., R.B. Turkentine and M.C.K. Wiltshire, Growth of antiferromagnetic γ-MnCu crystals 49 (1980) 766
Capella, L., see Billia 49 (1980) 431
Capper, P., see Bartlett 49 (1980) 600
Catalano, A., The growth of large Zn_3P_2 crystals by vapor transport 49 (1980) 681
Chattopadhyay, K., S. Lele and P. Ramachandrarao, On the occurrence of twinned dendrites in rapidly solidified aluminium alloys 49 (1980) 322
Christoffersen, J., Kinetics of dissolution of calcium hydroxyapatite. III. Nucleation-controlled dissolution of a polydisperse sample of crystals 49 (1980) 29
Claassen, W.A.P., see Bloem 49 (1980) 435
Cordes, M.R., see Coriell 49 (1980) 13
Coriell, S.R., M.R. Cordes, W.J. Boettinger and R.F. Sekerka, Convective and interfacial instabilities during unidirectional solidification of a binary alloy 49 (1980) 13

Cory, W.K., see Riveros 49 (1980) 85
Cross, L.E., see Hayashi 49 (1980) 687

Davey, R.J., see Zižić 49 (1980) 675
De Kock, A.J.R. and W.M. van de Wijgert, The effect of doping on the formation of swirl defects in dislocation-free Czochralski-grown silicon crystals 49 (1980) 718
DiGiuseppe, M.A., S.L. Soled, W.M. Wenner and J.E. Macur, Phase diagram relationships of the garnet–perovskite transformation in the Gd_2O_3–Ga_2O_3 and Sm_2O_3–Ga_2O_3 systems 49 (1980) 746
Dumas, A., M. Lesésert, C.F. Woensdregt, P. Hartman et J.C. Monier, Relations entre la morphologie théorique et la morphologie observée des cristaux de $CdCl_2 \cdot 2.5H_2O$ 49 (1980) 233

Eberhardt, A., see Hashimoto 49 (1980) 410
Elliott, E., see Tomlinson 49 (1980) 115
Eustathopoulos, N., see Passerone 49 (1980) 757

Favier, J.-J., Initial transient segregation during unidirectional solidification of a binary alloy in a furnace with thermal damping 49 (1980) 373
Feigelson, R.S. and R.K. Route, Vertical Bridgman growth of $CdGeAs_2$ with control of interface shape and orientation 49 (1980) 261
Feigelson, R.S. and R.K. Route, Optical imaging of growth defects in infrared crystals 49 (1980) 399
Fischer, D.J. and W. Kurz, Interface stability as a measure of material purity 49 (1980) 204
Foxon, C.T., B.A. Joyce and M.T. Norris, Composition effects in the growth of $Ga(In)As_yP_{1-y}$ alloys by MBE 49 (1980) 132
Foxon, C.T., B.A. Joyce and M.T. Norris, Composition effects in the growth of $Ga(In)As_yP_{1-y}$ alloys by MBE (E) 49 (1980) 774
Fritsche, H., see Bonchev 49 (1980) 90
Fueki, K., see Tsuiki 49 (1980) 71

Gesland, J.Y., Growth of large $KZnF_3$ single crystals by the Czochralski method 49 (1980) 771
Gevers, G., A. Lachter, M. Salagoity, A.S. Barrière and L. Lozano, Preparation and characterization of nickel fluoride thin films 49 (1980) 45
Gilmer, G.H., Transients in the rate of crystal growth 49 (1980) 465
Gokhman, L.Z., see Leonyuk 49 (1980) 141
Gonda, T., The influence of the diffusion of vapor and heat on the morphology of ice crystals grown from the vapor 49 (1980) 173
Goodarz-Nia, I. and M. Motamedi, Kinetics of calcium carbonate crystallization from aqueous solutions 49 (1980) 125
Grange, G., R. Landers and B. Mutaftschiev, Contact angles and free energies at the solid–melt interface of mixed KCl–NaCl crystals 49 (1980) 343

Haefke, H., M. Krohn and A. Panov, The surface structure of vapour-deposited films of AgBr and AgCl 49 (1980) 7
Hallett, J., see Keller 49 (1980) 458
Halliburton, L.E., see Armington 49 (1980) 739
Hampshire, M.J., see Tomlinson 49 (1980) 115
Harris, J.E., see Bartlett 49 (1980) 600
Hart, M., see Bardsley 49 (1980) 612
Hartman, P. and P. Bennema, The attachment energy as a habit controlling factor. I. Theoretical considerations 49 (1980) 145
Hartman, P., The attachment energy as a habit controlling factor. II. Application to anthracene, tin tetraiodide and orthorhombic sulphur 49 (1980) 157
Hartman, P., The attachment energy as a habit controlling factor. III. Application to corundum 49 (1980) 166
Hartman, P., see Dumas 49 (1980) 233
Hashimoto, S., A. Eberhardt and B. Baudelet, Two-phase (α/β)-brass bicrystals with nearly uniform and thermodynamic equilibrium concentrations 49 (1980) 410
Hashimoto, S., see Sato 49 (1980) 665
Haworth, L., see Tomlinson 49 (1980) 115
Hayashi, K., A.S. Bhalla, R.E. Newnham and L.E. Cross, Crystal growth of the corundum-type iron and chromium oxide solid solution by chemical transport reaction 49 (1980) 687
Hirth, J.P., see Yacamán 49 (1980) 475
Holcombe, C.E. and D.H. Johnson, Characterization of uranium borate (UB_2O_6) crystals 49 (1980) 207
Holland, L.R., A thermal transmission function for fused silica ampoules 49 (1980) 426

Holmes, D.E. and G.S. Kamath, Critical cooling rate for growth from large, low Prandtl number solutions: GaAs 49 (1980) 407
Hurle, D.J.T., see Bardsley 49 (1980) 612

Inoue, N., see Wada 49 (1980) 749
Ishii, E., see Tabata 49 (1980) 753
Ito, M., see Yoshikawa 49 (1980) 213
Itoh, H., see Takahashi 49 (1980) 445
Ivanov, L.N., see Orlov 49 (1980) 109
Iwanaga, H., T. Yoshiie, T. Yamaguchi and N. Shibata, Effects of an electric field on the growth of CdS crystals 49 (1980) 541

Janssen-van Rosmalen, R., see Van Enckevort 49 (1980) 502
Johnson, D.H., see Holcombe 49 (1980) 207
Jones, K.A., Mismatch dislocations and lattice distortion for Cd(S, Se) films grown on (111), (110) and (001) InP substrates 49 (1980) 522
Jordan, A.S., An evaluation of the thermal and elastic constants affecting GaAs crystal growth 49 (1980) 631
Joyce, B.A., see Foxon 49 (1980) 132
Joyce, B.A., see Foxon 49 (1980) 774

Kagawa, T., see Motosugi 49 (1980) 102
Kamath, G.S., see Holmes 49 (1980) 407
Karelin, V.V., see Orlow 49 (1980) 109
Kato, A. and N. Tamari, Some common aspects of the growth of TiN, ZrN. TiC and ZrC whiskers in chemical vapor deposition 49 (1980) 199
Kawabuchi, K. and S. Magari, Growth morphology of UO_2, ZrO_2, HfO_2, and ThO_2 crystallites grown from oxide plasmas 49 (1980) 81
Kawasumi, I., M. Sakata, I. Nishida and K. Masumoto, Crystal growth and characterization of $MnSi_{\sim 1.73}$ 49 (1980) 651
Keller, V.W., C.V. McKnight and J. Hallett, Growth of ice discs from the vapor and the mechanism of habit change of ice crystals 49 (1980) 458
Khan, M.Y. and S.Z. Ali, Optical and scanning electron microscopic examination of α- and β-Ga_2Se_3 49 (1980) 303
Kitazawa, K., see Tsuiki 49 (1980) 71
Knight, C.A., Icicles as crystallization phenomena 49 (1980) 193
Kobayashi, N. and T. Arizumi, Computational studies on the convection caused by crystal rotation in a crucible 49 (1980) 419
Kohra, K., see Wada 49 (1980) 749
Kondo, S., see Miyazawa 49 (1980) 670
Korec, J., Deposition of polysilicon as an example of a pyrolytic CVD process 49 (1980) 547
Koukitu, A. and H. Seki, Thermodynamic analysis for InGaAsP epitaxial growth by the chloride-CVD process 49 (1980) 325
Krishnamurthy, K.V., see Viswanathiah 49 (1980) 189
Krishnamurthy, K.V., see Tareen 49 (1980) 761
Krohn, M., see Haefke 49 (1980) 7
Krühler, W.W., see Plättner 49 (1980) 274
Kuroda, E. and T. Saitoh, Inhomogeneity in silicon single crystal ingots grown from metallurgical grade silicon 49 (1980) 53
Kurz, W., see Fischer 49 (1980) 204
Kyr, P., see Müller 49 (1980) 387

Lachter, A., see Gevers 49 (1980) 45
Ladell, J., see Nicolosi 49 (1980) 120
Lamprecht, G. and E. Schönherr, Growth of vanadium diiodide, VI_2, single crystals from the vapour phase 49 (1980) 415
Landers, R., see Grange 49 (1980) 343
Lang, A.R., see Bardsley 49 (1980) 612
Lefaucheux, F., see Ribet 49 (1980) 334
Lele, S., see Chattopadhyay 49 (1980) 322
Leonyuk, N.I., A.V. Pashkova and L.Z. Gokhman, Volatility of potassium trimolybdate melt and solubility of yttrium–aluminium borate in it 49 (1980) 141
Lesésert, M., see Dumas 49 (1980) 233
Lipko, H.A., see Wanklyn 49 (1980) 182
Lozano, L., see Gevers 49 (1980) 45

Macur, J.E., see DiGiuseppe 49 (1980) 746
Magari, S., see Kawabuchi 49 (1980) 81
Makino, H., see Mikami 49 (1980) 381
Markes, M., see Armington 49 (1980) 739
Masumoto, K., see Kawasumi 49 (1980) 651
Masumoto, T., see Tsuiki 49 (1980) 71
McKnight, C.V., see Keller 49 (1980) 458
Mekenyan, O., see Bonchev 49 (1980) 90
Meyer, H.J., see Stein 49 (1980) 696
Meyer, H.J. und B.J. Stein, Untersuchung der Kondensation und Verdampfung von Alkalihalogenidkristallen mit Molekularstrahlmethoden. VI. Zweidimensionale Keimbildung auf (100)-Flächen von Kaliumchlorid 49 (1980) 707
Mikami, M., K. Suzuki and H. Makino, Annealing effects on uniaxial magnetic anisotropy for CaGe-garnet epitaxial films grown by LPE 49 (1980) 381
Mikkelsen, Jr., J.C., Polytype characterization of SnS_2 crystals grown from Sn-rich melts 49 (1980) 253
Miyazawa, S., Fluid-flow effect on gas-bubble entrapment in Czochralski-grown oxide crystals 49 (1980) 515
Miyazawa, S., S. Kondo and M. Naganuma, A novel encapsulant material for LEC growth of GaSb 49 (1980) 670
Monier, J.C., see Dumas 49 (1980) 233
Motamedi, M., see Goodarz-Nia 49 (1980) 125
Motojima, S., S. Yokoe and K. Sugiyama, Pillar crystal growth of boron phosphide from the vapour in the presence of nickel impurity 49 (1980) 1
Motosugi, G. and T. Kagawa, Liquid-phase epitaxial growth and characterization of AlGaAsSb lattice-matched to GaSb substrates 49 (1980) 102
Müller, G., E. Schmidt and P. Kyr, Investigation of convection in melts and crystal growth under large inertial accelerations 49 (1980) 387
Müller-Krumbhaar, H., see Scheel 49 (1980) 291
Munir, Z.A., see Yacamán 49 (1980) 475
Mutaftschiev, B., see Grange 49 (1980) 343

Naganuma, M., see Miyazawa 49 (1980) 670
Napijalo, M.M., see Zižić 49 (1980) 675
Narang, R.S. and J.N. Sherwood, The purification and single crystal growth of n-alkanes 49 (1980) 357
Narang, R.S., see Begg 49 (1980) 735
Narayanan Kutty, T.R., see Tareen 49 (1980) 761
Newnham, R.E., see Hayashi 49 (1980) 687
Nicolosi, J. and J. Ladell, X-ray topographic analysis of dislocation line defects in solution grown deuterated triglycine fluoberyllate 49 (1980) 120
Nikiforov, K.G., see Radautsan 49 (1980) 67
Nishida, I., see Kawasumi 49 (1980) 651
Noack, M.A. and J.D. Verhoeven, The chemical characterization of zone refined lanthanum hexaboride 49 (1980) 595
Norris, M.T., see Foxon 49 (1980) 132
Norris, M.T., see Foxon 49 (1980) 774

Obyden, S.K., see Orlov 49 (1980) 109
Oeder, R., A. Scharmann and D. Schwabe, Growth and properties of various scheelite type mixed crystal systems 49 (1980) 349
Okada, M., see Sato 49 (1980) 665
Okuyama, F., Needle crystals arising from discharge-induced decomposition of hexacarbonyltungsten molecules 49 (1980) 531
Onodera, Y., see Oya 49 (1980) 643
Orlov, Yu.N., V.E. Bozhevol'nov, L.N. Ivanov, V.I. Sluev, S.K. Obyden, G.V. Saparin, G.V. Spivak and V.V. Karelin, Predisintegration phenomena in GaF_2 crystals activated by europium, manganese and gadolinium 49 (1980) 109
Oya, G. and Y. Onodera, Growth of Ga whiskers from GaN/Ga double layered films 49 (1980) 643

Packter, A., see Roy 49 (1980) 368
Pajaczkowska, A., The role of Mn–Al–Cl complexes in crystal growth of MnS, MnSe and MnTe by chemical vapor transport 49 (1980) 563
Panov, A., see Haefke 49 (1980) 7
Pashkova, A.V., see Leonyuk 49 (1980) 141
Passerone, A. and N. Eustathopoulos, Experimental study of the solid–liquid equilibrium roughening transition in Zn–In alloys 49 (1980) 757

Pastor, T., see Zižić 49 (1980) 675
Patel, A.R. and A. Venkateswara Rao, An improved design to grow larger and more perfect single crystals in gels 49 (1980) 589
Patel, P.D., see Agarwal 49 (1980) 693
Plättner, R.D., W.W. Krühler, W.K. Zwicker, T. Kovats and S.R. Chinn, The growth of large, laser quality $Nd_xRE_{1-x}O_{14}$ crystals 49 (1980) 274

Quelch, M.J.T., see Bartlett 49 (1980) 600

Radautsan, S.I., V.E. Tezlevan and K.G. Nikiforov, Crystal growth and the influence of structural defects on the physical properties of $CdCr_2S_4$ 49 (1980) 67
Rajan, K. and E.R. Wallach, A transmission electron microscopy study of intermetallic formation in aluminium–copper thin-film couples 49 (1980) 297
Ramachandrarao, P., see Chattopadhyay 49 (1980) 322
Rebizant, J., see Spirlet 49 (1980) 171
Ribet, J.L., see Ribet 49 (1980) 334
Ribet, M., J.L. Ribet, F. Lefaucheux and M.C. Robert, Growth defects in isomorphous $Ba(NO_3)_2$ and $Sr(NO_3)_2$ crystals 49 (1980) 334
Rinaudo, C. and R. Boistelle, The occurrence of uric acids and the growth morphology of the anhydrous monoclinic modification: $C_5H_4N_4O_3$ 49 (1980) 569
Ristić, R., see Zižić 49 (1980) 675
Riveros, H.G., W.K. Cory, R. Toca and E. Camarillo, An ellipsoidal mirror furnace for Czochralski growth 49 (1980) 85
Robert, M.C., see Ribet 49 (1980) 334
Roberts, K.J., see Begg 49 (1980) 735
Rosenberger, F., see Westphal 49 (1980) 607
Route, R.K., see Feigelson 49 (1980) 261
Route, R.K., see Feigelson 49 (1980) 399
Roy, B.N. and A. Packter, The crystallization of barium titanate from melts – a comparison of different prospective oxy-anion solvents 49 (1980) 368

Saitoh, T., see Kuroda 49 (1980) 53
Sakata, M., see Kawasumi 49 (1980) 651
Salagoity, M., see Gevers 49 (1980) 45
Saparin, G.V., see Orlov 49 (1980) 109
Sato, K., S. Hashimoto and M. Okada, Spiral growth of monostearine crystals grown from organic solution 49 (1980) 665
Satunkin, G.A., see Zhdanov 49 (1980) 659
Scharmann, A., see Oeder 49 (1980) 349
Scheel, H.J. and H. Müller-Krumbhaar, Crystal pulling using ACRT 49 (1980) 291
Scheerer, B., Preparation of NbN single crystals 49 (1980) 61
Schmidt, E., see Müller 49 (1980) 387
Schönherr, E., see Lamprecht 49 (1980) 415
Schwabe, D., see Oeder 49 (1980) 349
Sekerka, R.F., see Coriell 49 (1980) 13
Seki, H., see Koukitu 49 (1980) 325
Series, R.W., K.G. Barraclough and W. Bardsley, Quantitative determination of microdefect density in dislocation-free silicon by preferential chemical etching 49 (1980) 363
Sharma, G.L., see Sharma 49 (1980) 580
Sharma, S.D., G.L. Sharma and V.K. Agrawal, Growth mechanism of cadmium iodide polytypes 49 (1980) 580
Sherwood, J.N., see Narang 49 (1980) 357
Sherwood, J.N., see Begg 49 (1980) 735
Shibata, N., see Iwanaga 49 (1980) 541
Shinohara, K., see Yoshikawa 49 (1980) 213
Shiroki, K., see Tsuiki 49 (1980) 71
Sluev, V.I., see Orlov 49 (1980) 109
Solari, M. and H. Biloni, Microsegregation in cellular and cellular dendritic growth 49 (1980) 451
Soled, S.L., see DiGiuseppe 49 (1980) 746
Spirlet, J.C., E. Bednarczyk, J. Rebizant et C.T. Walker, Préparation de monocristaux de dioxyde de neptunium par transport chimique en phase gazeuse 49 (1980) 171

Spivak, G.V., see Orlov 49 (1980) 109
Stein, B.J. und H.J. Meyer, Untersuchung der Kondensation und Verdampfung von Alkalihalogenidkristallen mit Molekularstrahlmethoden. V. Zur zweidimensionalen Keimbildung und Lochkeimbildung 49 (1980) 696
Stein, B.J., see Meyer 49 (1980) 707
Sugiura, H., see Sugiura 49 (1980) 559
Sugiura, T., H. Sugiura, A. Tanaka and T. Sukegawa, Low temperature phase diagram of In–Ga–P ternary system 49 (1980) 559
Sugiyama, K., see Motojima 49 (1980) 1
Sukegawa, T., see Sugiura 49 (1980) 559
Suzuki, K., see Mikami 49 (1980) 381

Tabata, H. and E. Ishii, Spinel twin formation in flux grown $MgAl_2O_4$ crystals 49 (1980) 753
Takahashi, T. and H. Itoh, Ultrasonic chemical vapor deposition of TiB_2 thick films 49 (1980) 445
Takahei, K., A weighing method of source materials for liquid phase epitaxy 49 (1980) 403
Takke, R. and W. Assmus, Growth and characterization of $CePd_3$-single crystals 49 (1980) 97
Talyanskaya, N.N., see Zhdanov 49 (1980) 659
Tamari, N., see Kato 49 (1980) 199
Tanaka, A., see Sugiura 49 (1980) 559
Tareen, J.A.K., see Viswanathiah 49 (1980) 189
Tareen, J.A.K., T.R. Narayanan Kutty and K.V. Krishnamurty, Hydrothermal growth of $Y_2(CO_3)_3 \cdot n\,H_2O$ (tengerite) single crystals 49 (1980) 761
Tatarchenko, V.A., see Zhdanov 49 (1980) 659
Tezlevan, V.E., see Radautsan 49 (1980) 67
Tiller, W.A. and K.-S. Ahn, Interface field effects on solute redistribution during crystallization 49 (1980) 483
Toca, R., see Riveros 49 (1980) 85
Tomlinson, R.D., E. Elliott, L. Haworth and M.J. Hampshire, The growth and doping of single crystals of $CuInTe_2$ 49 (1980) 115
Trivedi, R., Theory of dendritic growth during the directional solidification of binary alloys 49 (1980) 219
Trivedi, S.B., see Bhatt 49 (1980) 743
Tsuiki, H., K. Kitazawa, T. Masumoto, K. Shiroki and K. Fueki, Single crystal growth of pure and Nd-doped Y_2O_3 by floating zone method with Xe arc lamp imaging furnace 49 (1980) 71
Turkentine, R.B., see Campbell 49 (1980) 766

Ueda, R., see Yoshikawa 49 (1980) 213

Van der Linden, W.H., see Van Enckevort 49 (1980) 502
Van de Wijgert, W.M., see De Kock 49 (1980) 718
Van Enckevort, W.J.P., R. Janssen-van Rosmalen and W.H. van der Linden, Evidence for spiral growth on the pyramidal faces of KDP and ADP single crystals 49 (1980) 502
Venkateswara Rao, A., see Patel 49 (1980) 589
Verhoeven, J.D., see Noack 49 (1980) 595
Viltange, M., Orientation cristalline et répartition des cristaux insulaires à la surface des monocristaux de fer de zone fondue 49 (1980) 309
Viswanathiah, M.N., J.A.K. Tareen and K.V. Krishnamurthy, Low temperature hydrothermal synthesis of magnetite 49 (1980) 189

Wada, K., N. Inoue and K. Kohra, Diffusion-limited growth of oxide precipitates in Czochralski silicon 49 (1980) 749
Walker, C.T., see Spirlet 49 (1980) 171
Walker, P.J., Melt growth of $LiHoF_4$ 49 (1980) 77
Wallach, E.R., see Rajan 49 (1980) 297
Wani, P.A., see Agarwal 49 (1980) 693
Wanklyn, B.M. and H.A. Lipko, Solubility and relative supersaturation in the fluxed melt system Fe_2O_3–PbO–V_2O_5 49 (1980) 182
Wenner, W.M., see DiGiuseppe 49 (1980) 746
Westphal, G.H. and F. Rosenberger, Matrix isolation infrared studies of chemical vapor transport in the system TiO_2 : $TeCl_4$ 49 (1980) 607
White, E.A.D., see Babai 49 (1980) 245
Wiltshire, M.C.K., see Campbell 49 (1980) 766
Woensdregt, C.F., see Dumas 49 (1980) 233

Yacamán, M.J., Z.A. Munir and J.P. Hirth, The influence of an electric field on the sublimation kinetics of alkali halide surfaces 49 (1980) 475
Yahagi, M., Single crystal growth of LiAl 49 (1980) 396
Yamaguchi, T., see Iwanaga 49 (1980) 541
Yokoe, S., see Motojima 49 (1980) 1
Yoshiie, T., see Iwanaga 49 (1980) 541
Yoshikawa, M., M. Ito, K. Shinohara and R. Ueda, Heterointerface morphology of $Pb_{1-Y}Sn_YTe$–$Pb_{1-X}Te$ (X, $Y \lesssim 0.3$) double heterostructure (DH) grown by LPE 49 (1980) 213

Zegarac, S., see Zižić 49 (1980) 675
Zhdanov, A.V., G.A. Satunkin, V.A. Tatarchenko and N.N. Talyanskaya, Cylindrical pores in a growing crystal 49 (1980) 659
Zižić, B., R.J. Davey, S. Zegarac, T. Pastor, R. Ristić and M.M. Napijalo, The growth of ADP crystals in the presence of manganese ions 49 (1980) 675
Zwicker, W.K., see Plättner 49 (1980) 274

SUBJECT INDEX

Accelerated crucible rotation technique (ACRT) 291
Adsorption 132, 435, 458
Alkali halides 475
n-Alkanes 357
Alloys 13, 219, 297, 322, 410, 431, 451, 757, 766
Aluminum
– nickel 322
– platinum 322
– zinc 322
Ammonium
– dihydrogen phosphate 502, 675
Anthracene 157
Apparatus
– for melt growth
– – by Czochralski
– – – of lithium holmium fluoride 77
– – – by Hukin type cold crucible
– – – – of γ-manganese copper alloy 766
– – by Tammann method
– – – of lithium aluminum 396
– – by uniaxial solidification
– – – of electro-optic organic crystals 245
– – by zone melting (rf)
– – – of niobium nitride 61
– – – of yttrium oxide 71
– for solution growth
– – by flux
– – – of gallium arsenide 407
– – – of neodymium pentaphosphate 274
– for thin film
– – by vapor phase epitaxy
– – – by chemical vapor deposition
– – – – in an ultrasonic field
– – – – – of titanium boride 445
– – – by evaporation and condensation
– – – – of nickel fluoride 45
– for vapor growth
– – by electrolysis of plasma
– – – of actinide dioxides 81
– by electrostatic field
– – of cadmium sulphide 541
– – by evaporation and condensation
– – – of ice 458
– for vapor–liquid–solid growth
– – of boron phosphide 1
– for whisker growth
– – of tungsten 531
– for miscellaneous purposes
– – control of temperature distribution 71
– – ellipsoidal mirror furnace for Czochralski 85
– – multiple gravity centrifuge arrangement 387
– – removal of indium from surface of epitaxy 591
– – sealed ampoule growth 426

Band gap 349
Barium
– nitrate 334
– titanate 368
Boron
– phosphide 1
Boundary layer control 419
Brass 410
Burton–Cabrera–Frank (BCF) law 145

Cadmium
– chloride, hydrate 233
– chromium sulphide 67
– germanium arsenide 261, 399
– iodide 580
– sulphide 541
– sulphide selenide 522
Calcium
– carbonate 125
– fluoride 109
– hydroxyapatite 29
Cellular growth 193, 219, 451, 612
Cerium
– palladium ($CePd_3$) 97
Characterization methods
– by absorption (uv, visible) 45
– by atomic absorption spectrometry 29, 77, 368
– by backscattering of α particles 45
– by chemical analysis 61, 189, 207, 368, 595, 651, 670, 675, 718
– by density 207, 631
– by elastic constants 97, 631
– by electrical methods 45, 53, 67, 102, 115, 396, 600, 670, 681, 693
– by electron diffraction 29, 580
– by electron microscopy 1, 7, 45, 81, 97, 109, 132, 189, 213, 297, 303, 322, 349, 357, 415, 445, 531, 541, 580, 665, 687, 696, 707, 718, 746, 749, 757
– by electron spin resonance 739
– by emission spectroscopy 739
– by EPMA 71, 97, 132, 410, 589, 746
– by ferroelasticity 274
– by infra-red transmission 29, 368, 399, 761, 771
– – using matrix isolation 607

– by lasing properties 274
– by magnetization 381
– by neutron activation analysis 718
– by neutron diffraction 61, 766
– by optical microscopy 29, 53, 71, 102, 115, 171, 193, 207, 274, 303, 309, 363, 368, 415, 458, 502, 515, 563, 569, 580, 589, 643, 651, 665, 670, 681, 693, 718, 739, 743, 753, 761, 766, 771
– by Q resonance 739
– by secondary ion microanalysis 53, 132
– by spark source mass spectroscopy 53
– by specific surface area 29
– by superconducting transition temperature 61
– by thermal analysis 29, 182, 207, 746
– by thermal expansion 631
– by viscosity 631
– by X-ray techniques 1, 29, 45, 53, 61, 77, 81, 97, 102, 115, 120, 132, 171, 189, 207, 213, 233, 245, 253, 303, 309, 334, 349, 357, 368, 396, 410, 445, 458, 531, 569, 580, 589, 612, 643, 651, 687, 693, 718, 735, 739, 761
Computer simulation – Monte Carlo Method 145, 419, 465
Convection 13, 291, 387, 407, 419, 515
Constitutional supercooling 431, 483, 612
Copper
– aluminum 297
– indium telluride 115
Corundum 166

Decorations 7
Dendritic growth 219, 322, 451, 458
Diffusional control 173, 373, 381, 410, 547, 659, 681, 749
Dislocations 7, 71, 120, 145, 274, 334, 357, 363, 410, 475, 502, 522, 580, 589, 612, 631, 665, 735
Dissolution 29, 274
Distribution coefficient 109, 357, 483, 659

Electro-optic organic crystals 245
Etching
– chemical 53, 71, 97, 102, 334, 357, 363, 410, 435, 445, 502, 541, 589, 591, 612, 665, 718, 739, 743, 757

Ferric
– oxide (α) 182

Gadolinium
– gallium garnet 746
Gallium 643
– aluminum arsenide antimonide 102
– antimonide 670
– arsenide 407, 631
– doped Germanium 373
– indium arsenide phosphide 132
– selenide 303
Garnets 381, 746
Germanium 612
Greenhouse effect 426

Hafnium
– dioxide 81
Heat flow control 261, 373, 631

Ice 173, 193, 458
Impurity 1, 53, 61, 109, 171, 204, 261, 595, 600, 659, 675, 696, 707, 718, 739, 753
Inclusions 53, 120, 739, 757
Indium
– antimonide 387
– gallium arsenide phosphide 325
– gallium phosphide 559
– phosphide 522, 591
Interface 13, 53, 204, 213, 261, 297, 343, 410, 431, 483, 515, 522, 659, 757
Intermetallic compounds 97
Iron 309
– chromium oxide 687
Iron (III) oxide, α 182
Iron oxide, Fe_3O_4 189

Kinetics
– of dislocation propagation 120
– of growth 1, 53, 125, 132, 145, 204, 219, 274, 297, 435, 465, 547, 580, 675, 681, 749
– of interface control 213, 373
– of nucleation 29, 297, 458, 696, 707
– of sublimation 475

Lanthanum
– hexaboride 595
Laser 274, 746
Lattice mismatch 102, 325, 522
Lead
– germanate ($Pb_5Ge_3O_{11}$) 515
– iodide 589
– tin telluride 213
Lithium
– aluminum 396
– holmium fluoride 77
– niobate 515
– tantalate 515

Magnesium
– aluminate 753
Magnetite 189
Manganese
– copper 766
– selenide 563
– silicide 651
– sulphide 563
– telluride 563
Matrix isolation infrared spectroscopy 607
Melt growth
– Bridgman–Stockbarger
– – of n-alkanes 357

– – of brass 410
– – of cadmium germanium arsenide 261
– – of calcium fluoride 109
– – of gallium doped germanium 373
– – of indium antimonide 387
– – of lithium holmium fluoride 77
– – of manganese silicide 651
– – of mercury cadmium telluride 600
– – of molybdates 349
– – of tin disulphide
– by cast-recrystallize anneal
– – of mercury cadmium telluride 600
– by Czochralski
– – of gallium arsenide 631
– – of garnets 746
– – of germanium 612
– – of lithium holmium fluoride 77
– – of γ-manganese copper 766
– – of molybdates 349
– – of oxides 515
– – of potassium zinc fluoride 771
– – of silicon 53, 363, 718, 749
– – of tungstates 349
– – theory of 419
– – using ACRT
– – – theory of 291
– – using levitated melt
– – – of cerium tri-palladium 97
– by floating zone
– – of lanthanum hexaboride 595
– – of niobium nitride 61
– – of yttrium oxide 71
– by liquid encapsulated Czochralski
– – of gallium antimonide 670
– by Stepanov's technique
– – of sapphire 659
– by Tammann method
– – of lithium aluminium 396
– by uniaxial solidification
– – of aluminum alloys 322
– – of copper indium telluride 115
– – of gallium doped germanium 373
– – of organic crystals 245
– – theory of 431
– by zone melting
– – of lanthanum hexaboride 595
– – of niobium nitride 61
– – theory of 13, 631, 659
Mercury
– cadmium telluride 600
Microsegregation 451
Molybdates 349
Molybdenum tungsten selenide 693
Morphological stability 13, 213, 431, 541, 757
Morphology of growth 1, 71, 81, 120, 125, 145, 157, 166, 173, 182, 193, 204, 207, 233, 253, 261, 274, 309, 322, 334, 349, 368, 387, 415, 458, 475, 502, 665, 675, 746, 749, 753, 761
Neptunium
– dioxide 171
Nickel
– fluoride 45
Niobium
– nitride 61
Nucleation 125, 145, 182, 253, 274, 297, 309, 368, 580, 753

Organic materials 204

Perfection of crystals 7, 45, 67, 109, 245, 274, 303, 349, 357, 363, 399, 522, 547, 600, 612, 631, 659, 718, 739, 749, 753
Periodic bond chains (PBC) 145, 157, 166, 233, 569
Phase diagrams 182, 213, 253, 274, 410, 559, 600, 670, 746
Phenomenological theory 193, 274, 363, 407, 515, 659
Polytypism 253, 580, 665
Potassium
– chloride 343, 696, 707
– dihydrogen phosphate 502
– zinc fluoride 771
Purification 204

Quartz, alpha 739

Samarium
– gallium garnet 746
Sapphire 659
Scheelite type 349
Selenium
– tellurium 743
Shear stress 631
Silicon 53, 291, 363, 435, 718, 749
– polycrystalline 547
Silver
– bromide 7
– chloride 7
Sodium
– chloride 343
Solar cells 522, 681
Solid growth technique
– by gas diffusion
– of niobium nitride 61
– by recrystallization
– – of gallium 643
– by solid diffusion
– – of brass 410
– by strain anneal
– – of zinc indium alloy 757
Solubility 141, 182, 368
Solution growth
– by diffusion
– – of TTF–TCNQ 735
– by flux
– – of barium titanate 368
– – of gallium arsenide 407
– – of iron (III) oxide, α 182
– – of magnesium aluminate 753

– – of neodymium pentaphosphate 274
– – of uranium borate 207
– – of yttrium aluminum borate 141
– by freezing
– – of water 193
– by gel
– – of lead iodide 589
– by hydrothermal growth
– – of magnetite 189
– of α-quartz 739
– – of triglycine fluoberyllate (deuterated) 120
– – of yttrium carbonate 761
– by low temperature
– – of ADP 502, 675
– – of alkaline earth nitrates 334
– – of calcite 125
– – of KDP 502
– – of monostearine 665
– – of uric acid 569
Spinel 753
Stearine
– mono 665
Stefan problem or moving boundary problem 483
Step 7, 53
Strain 274, 522, 643, 739
Strontium
– nitrate 334
Sulphur 157
Supercooling, super saturation 145, 182, 458, 569, 659
Surface energy, determination of 29, 157, 166, 233
Surface processes, theory 29, 145, 483, 547, 707
Surface structure 7, 102, 157, 166, 233, 291, 309, 349, 445, 458, 475, 502, 569, 665, 757

Tengerite 761
Thallium
– arsenide selenide (Tl_3AsSe_3) 399
Thermodynamics 29, 115, 141, 145, 182, 233, 253, 325, 343, 373, 381, 431, 435, 483, 559, 563, 607, 687
Thin film
– by liquid phase epitaxy
– – of gallium (aluminum) (arsenide) antimonide 102
– – of gallium arsenide 407
– – of indium phosphide 591
– – of lead tin telluride 213
– – of YIG, doped 381
– – weighing method of source materials for 403
– by molecular beam epitaxy
– – of gallium indium arsenide phosphide 132
– by vapor phase epitaxy
– – through chemical vapor deposition
– – – of indium gallium arsenide phosphide 325
– – – – theory of 325
– – of silicon 435
– – – using ultrasonic field
– – – – for titanium boride 445
– – through evaporation and condensation
– – – of copper aluminum 297
– – of nickel fluoride 45
– – – of silver bromide 7
– – – of silver chloride 7
– – theory of 522, 547
Thorium
– dioxide 81
Tin
– carbide 199
– disulphide 253
– nitride 199
tetraiodide 157
Titanium
– boride 445
– dioxide 607
Topological modelling of crystal growth 90
Triglycine fluoberyllate (deuterated) 120
TTF–TCNQ 735
Tungstates 349
Tungsten 531
Twinning 53, 309, 322, 753

Uranium
– borate 207
– dioxide 81

Vanadium
– diiodide 415
Vapor growth technique
– by chemical transport
– – of cadmium chromium sulphide 67
– – of interstitial carbides 199
– – of interstitial nitrides 199
– – of iron chromium oxide 687
– – of manganese chalcogenides 563
– – of neptunium dioxide 171
– – of titanium dioxide 607
– – of vanadium diiodide 415
– by electrolysis of plasma
– – of actinide dioxides 81
– – of hafnium zirconium dioxides 81
– by electrostatic field
– – of cadmium sulphide 541
– by evaporation and condensation
– – of alkali halides 475
– – of cadmium iodide 580
– – of ice 173, 458
– – of molybdenum tungsten selenide 693
– – – using perforated capsule technique
– – of zinc phosphide 681
– by molecular beam
– – of potassium chloride 696, 707
Vapor–liquid–solid growth 1, 199

Whisker growth
– of gallium 643
– of interstitial carbides 199

– of interstitial nitrides 199
– of tungsten 531

Ytrrium
– aluminum borate 141
– carbonate 761
– iron garnet, doped 381
– oxide 71
– – neodymium, doped 71

Zinc
– indium 757
– phosphide 681
Zirconium
– carbide 199
– nitride 199